## SEQUENCE LISTING

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<110> NAGATA, Shigekazu
     YATOMI, Takehiro
     SUDA, Takashi
<120> PROPHYLACTIC/THERAPEUTIC AGENT
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<140> 09/297,328
<141> 1999-04-29
<150> PCT/JP97/03978
<151> 1997-10-31
<160> 12
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Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
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                                                                   144
gcc tct ctg gga gac aga gtc acc atc agt tgc agg gcc agt cag gac
Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
         35
att agc aat tat tta aac tgg tat cag cag aaa cca gat gga act gtt
                                                                   192
Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
     50
aaa ctc ctq atc tac tac aca tca aga tta cac tca gga gtc cca tca
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Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
 65
                     70
agg ttc agt ggc agt ggg tct ggg aca aat tat tct ctc acc att agc
                                                                   288
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asn Tyr Ser Leu Thr Ile Ser
aac ctg gaa caa gga gat att gcc act tac ttt tgc caa cag ggt agt
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Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
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Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
                             40
Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asn Tyr Ser Leu Thr Ile Ser
Asn Leu Glu Gln Gly Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Ser
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                                      10
gcc caa gca cag atc cag ttg gtg cag tct gga cct gag ctg aag aag
                                                                   96
Ala Gln Ala Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
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                                  25
cct gga gag aca gtc aag atc tcc tgc aag gct tct ggg tat acc ttc
Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
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acg ctt ccg tgg acg ttc ggt gga ggc acc aag ctg gaa atc aaa

35 40 45

	_			_				_	_	_			_	ggt Gly		192
														tat Tyr		240
														gcc Ala 95		288
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														ggc Gly		384
	acc Thr 130															408
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Pro	Gly	Glu 35	Thr	Val	Lys	Ile	Ser 40	Cys	Lys	Ala	Ser	Gly 45	Tyr	Thr	Phe	
Thr	Glu	Туг	Dree		•	Trn	3707	T	~1.		Dage	a1	Tara	Gly	Phe	
	50	ı yı	PIO	Met	HIS	55	val	пув	Gin	Ата	60	GIY	пуъ	O <sub>1</sub>	1110	
Lys 65	50	_				55					60			Tyr		
65	50 Trp	Met	Gly	Met	Ile 70	55 Tyr	Thr	Asp	Thr	Gly 75	60 Glu	Pro	Ser		Ala 80	
65 Glu	50 Trp Glu	Met Phe	Gly Lys	Met Gly 85	Ile 70 Arg	55 Tyr Phe	Thr Ala	Asp Phe	Thr Ser 90	Gly 75 Leu	60 Glu Glu	Pro Thr	Ser Ser	Tyr	Ala 80 Ser	

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                                                          15
gga tca acc gga gat att cag atg acc cag agt ccg tcg acc ctc tct
                                                                   96
Gly Ser Thr Gly Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser
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gct agc gtc ggg gat agg gtc acc ata act tgc agg gca agt cag gac
                                                                   144
Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp
att tcg aat tat tta aac tgg tat cag cag aag cca ggc aaa gct ccc
                                                                   192
Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
aag ctt cta att tat tac aca tca aga tta cac tca ggg gta cct tca
                                                                   240
Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
cgc ttc agt ggc agt gga tct ggg acc aat tat acc ctc aca atc tcg
                                                                   288
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asn Tyr Thr Leu Thr Ile Ser
                 85
agt ctg cag cca gat gat ttc gcc act tat ttt tgc caa cag ggt agt
                                                                   336
Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Phe Cys Gln Gln Gly Ser
            100
                                                     110
acg ctt ccg tgg acg ttc ggt cag ggg acc aag gtg gag gtc aaa
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Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
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Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser 65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asn Tyr Thr Leu Thr Ile Ser
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Thr Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Val Lys 115 120 125

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gcc caa gca cag gtc cag ttg gtg cag tct gga gct gag gtg aag aag 96
Ala Gln Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
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cct gga agc tca gtc aag gtg tcc tgc aaa gct tct ggg tat acc ttc 144
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

aca gaa tat cca atg cac tgg gtg aga cag gct cca gga cag ggt ttc 192
Thr Glu Tyr Pro Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Phe
50 55 60

aag tgg atg ggc atg ata tac acc gac act gga gag cca tca tat gct 240 Lys Trp Met Gly Met Ile Tyr Thr Asp Thr Gly Glu Pro Ser Tyr Ala 65 70 75 80

gaa gag ttc aag gga cgg ttt aca ttc act ttg gac acc tct acc aac 288 Glu Glu Phe Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Asn 85 90 95

act gcc tat atg gag ctc agc tct ctc agg tct gag gac acg gct gtc 336 Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 100 105 110

tat tac tgt gta aga ttt tac tgg gat tac ttt gac tac tgg ggt caa 384
Tyr Tyr Cys Val Arg Phe Tyr Trp Asp Tyr Phe Asp Tyr Trp Gly Gln
115 120 125

ggt acc ctg gtc aca gtc tcc tca Gly Thr Leu Val Thr Val Ser Ser 130 135 408

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Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe 35 40 45

Thr Glu Tyr Pro Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Phe
50 55 60

Lys Trp Met Gly Met Ile Tyr Thr Asp Thr Gly Glu Pro Ser Tyr Ala
65 70 75 80

Glu Glu Phe Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Asn 85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 100 105 110

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Gly Thr Leu Val Thr Val Ser Ser 130 135

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					aag Lys						149
					gly ggg	_	_	-	_		197
	_	_	 _		gac Asp		_				245
					gaa Glu 80						293
					acc Thr						341
					gaa Glu						389
					tgc Cys						437
]					aac Asn				_	_	485
					gca Ala 160						533
					ccc Pro						581
					gtg Val						629
					gtg Val						677
Ì					cag Gln						725

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Pro Cys Pro Pro 35	Gly Glu Arg I	Lys Ala Arg Asp 40	Cys Thr Val Asn Gly								

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Lys Ala His Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu 65 70 75 80

Gly His Gly Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr
85 90 95

Lys Cys Arg Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu
100 105 110

His Cys Asp Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys
115 120 125

Thr Leu Thr Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn 130 135 140

Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala 145 150 155 160

Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro 165 170 175

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
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Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val 195 200 205

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln 210 215 220

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln 225 230 235 240

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala 245 250 255

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
260 265 270

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr 275 280 285

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser 290 295 300

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr 305 310 315 320

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr 325 330 335

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe 340 345 350

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ctg cat cat gat ggc caa ttc tgc cat aag ccc tgt cct cca ggt g Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro Pro Gly G 25 30 35	-
agg aaa gct agg gac tgc aca gtc aat ggg gat gaa cca gac tgc g Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro Asp Cys V 40 45 50	
ccc tgc caa gaa ggg aag gag tac aca gac aaa gcc cat ttt tct t Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His Phe Ser S 55 60 65	
aaa tgc aga aga tgt aga ttg tgt gat gaa gga cat ggc tta gaa g Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly Leu Glu V 75 80 85	
gaa ata aac tgc acc cgg acc cag aat acc aag tgc aga tgt aaa c Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg Cys Lys I 90 95 100	
aac ttt ttt tgt aac tct act gta tgt gaa cac tgt gac cct tgc a Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp Pro Cys 5 105 110 115	
aaa tgt gaa cat gga atc atc aag gaa tgc aca ctc acc agc aac a Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr Ser Asn 5 120 125 130	
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Asp Glu Pro Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp 50 55 60

Lys Ala His Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu 65 70 75 80

Gly His Gly Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr 85 90 95

Lys Cys Arg Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu
100 105 110

His Cys Asp Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys 115 120 125

Thr Leu Thr Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn 130 135 140

Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro 145 150 155